

Genitourinary Medicine

A McMILLAN
(Editor)

M WAUGH
(Hon Sec.
MSSVD)

A MEHEUS

EDITOR,
British Medical Journal

B A EVANS
(President, MSSVD)

M W ADLER

P PIOT

E BELSEY
(Statistical Adviser)

R S PATTMAN
(Assistant Editor,
Abstracts)

R A COUTINHO

D TAYLOR-ROBINSON

JENNIFER WRIGHT
(Indexer)

L M DRUSIN

R N THIN

DEIRDRE SEYMOUR
(Technical Editor)

F JUDSON

H YOUNG

This *Journal*, founded by the Medical Society for the Study of the Venereal Diseases, publishes original work on the investigation and treatment of genitourinary and allied disorders, and review articles, correspondence, and abstracts.

Advice to authors Papers for publication, which will be accepted on the understanding that they have not been and will not be published elsewhere and are subject to editorial revision, should be sent in duplicate to **Dr A McMillan**, Department of Genitourinary Medicine, Royal Infirmary, Lauriston Place, Edinburgh EH3 9YW. All authors must give signed consent to publication. The editor should be notified of any change of address of the corresponding author. Manuscripts will only be acknowledged if a stamped addressed postcard or international reply coupon is enclosed.

Full details of requirements for manuscripts in the Vancouver style (*Br Med J* 1982; **284**: 1766-70) are given in *Uniform requirements for manuscripts submitted to biomedical journals*, available from the Publishing Manager, *British Medical Journal*, BMA House (50p post free). Briefly details are as follows:

(1) *Scripts* must be typewritten on one side of the paper in double spacing with ample margins. Two copies should be sent; if a paper is rejected, one copy will be retained.

(2) *Each script* should include, in the following order: a brief summary, typed on a separate sheet, outlining the main observations and conclusions; the text divided into appropriate sections; acknowledgements; tables, each on a separate sheet; and legends for illustrations.

(3) *The title* of the paper should be as brief as possible.

(4) *The number of authors* should be kept to the minimum, and only their initials and family names used.

(5) *Only the institution(s)* where work was done by each author should be stated.

(6) *SI units* are preferred. If old fashioned units are used SI units should be given in parentheses or, for tables and figures, a conversion factor given as a footnote.

(7) *Only recognised abbreviations* should be used.

(8) *Acknowledgements* should be limited to workers whose courtesy or help extended beyond their paid work, and supporting organisations.

(9) *Figures* should be numbered in the order in which they are first mentioned, referred to in the text, and provided with captions typed on a separate sheet. (*Diagrams*: use thick, white paper and insert lettering lightly in pencil. *Photographs*: should be marked lightly on the back with the author's name and indicating the top, and should not be attached by paper clips or pins. They should be trimmed to include only the relevant section (sizes 2 3/4" or 5 3/4" wide, maximum 5 3/4" x 7") to eliminate the need for reduction. Photomicrographs must have internal scale markers. X ray films should be submitted as photographic prints, carefully prepared so that they bring out the exact point to be illustrated.

(10) *Tables* should be numbered, have titles, and be typed on separate sheets. Please avoid large tables.

(11) *References* should be numbered consecutively the first time they are cited and identified by arabic numbers in the

text, tables, and legends to figures. Authors must take full responsibility for the accuracy of their references, and the list should be kept as short as practicable. It should be in the order in which references are first mentioned, and should include (in the following order), *journals*: author's name and initials, title of paper, name of journal (in full or abbreviated according to the list in *Index Medicus*, year of publication, volume number, and first and last page numbers; *books*: author's name and initials, full title, edition, place of publication, publisher, and year of publication. When a chapter in a book is referred to, the name and initials of the author of the chapter, title of the chapter, "In:", name and initials of the editor, and "ed" should precede book title, etc as above. In references to journals or books, when there are seven or more authors the names of the first three should be given followed by "*et al.*" Names of journals no longer published should be given in full — for example, *British Journal of Venereal Diseases*.

Proofs Contributors receive one proof, and should read it carefully for printers' errors and check the tables, figures, legends, and any numerical, mathematical, or other scientific expressions. Alterations should be kept to a minimum.

Reprints 25 reprints will be supplied free of charge. A limited number of additional reprints may be ordered from the Publishing Manager when the proofs are returned.

Notice to Subscribers This Journal is published bimonthly. The annual subscription rates are £58.00 inland and £67.00 overseas (including the USA). Orders should be sent to the Subscription Manager, *Genitourinary Medicine*, BMA House, Tavistock Square, London WC1H 9JR. Orders can also be placed locally through any leading subscription agent or bookseller. (For the convenience of readers in the USA, subscription orders, with or without payment, can be sent to: *British Medical Journal*, Box 560B, Kennebunkport, Maine 04046. All inquiries, however, including those regarding air mail rates and single copies already published, should be addressed to the publisher in London.)

Notice to advertisers Applications for advertisement space and for rates should be addressed to the Advertisement Manager, *Genitourinary Medicine*, BMA House, Tavistock Square, London WC1H 9JR.

Copyright © 1986 by *Genitourinary Medicine*. This publication is copyright under the Berne Convention and the International Copyright Convention. All rights reserved. Apart from any relaxations permitted under national copyright laws, no part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means without the prior permission of the copyright owners. Permission is not, however, required to copy abstracts of papers or of articles on condition that a full reference to the source is shown. Multiple copying of the contents of the publication without permission is always illegal.

TABLE Prevalence of antibody to cytomegalovirus (CMV) and history of sexually transmitted disease (STD)

History of STD	No (%) with antibody (n=232)	No (%) without antibody (n=63)	χ^2_1	p
Syphilis	29 (13)	4 (6)	1.9	NS
Gonorrhoea	60 (26)	8 (13)	4.8	<0.05
Non-specific urethritis	95 (41)	22 (35)	0.8	NS
Hepatitis B	47 (20)	6 (10)	3.9	0.05
Genital warts	53 (23)	8 (13)	3.5	0.05
Herpes	20 (9)	3 (5)	1	NS

CMV seropositivity in homosexual men might therefore be reflected in the number of patients infected with human T lymphotropic virus type III (HTLV-III) who progress to end stage disease.

Yours faithfully,
E Monteiro,
G R Kinghorn

Department of Genitourinary Medicine,
Royal Hallamshire Hospital,
Sheffield S10 2JF

References

1. Mindel A, Sutherland S. Antibodies to cytomegalovirus in homosexual and heterosexual men attending an STD clinic. *British Journal of Venereal Diseases* 1984;60:189-92.
2. Kinghorn GR, Monteiro E. Hepatitis B and HTLV-III infection in Sheffield. *Genitourin Med* (in press).
3. Drew WL, Conant MA, Miner RC, et al. Cytomegalovirus and Kaposi's sarcoma in young homosexual men. *Lancet* 1982;ii:125-7.

Notices

Organisers of meetings who wish to insert notices should send details to the editor (address on the inside front cover at least eight months before the date of the meeting or six months before the closing date for application).

Grand Orient de Belgique masonic lodge, Les Amis du Commerce et la Perseverance Reunis, 4th medical prize

In March 1987 the masonic lodge "Les Amis du Commerce et la Perseverance Reunis" in Antwerp will award its 4th medical prize of 30 000 ECU (£19 000).

The purpose of the prize is to reward a scientist or group of scientists who, in the course of their research work, have made a significant contribution to the progress of medical science whether theoretical or practical, fundamental or clinical. The prize may be divided between several candidates.

The prize will be awarded by jury of four members and a president appointed by the masonic lodge "Les Amis du Commerce et la Perseverance Reunis". The jury shall be entitled to call in experts for advice if it deems necessary. The members of the jury who will have been empanelled to attend the meetings will have to justify their judgment of the candidacies in writing. All deliberations will

be made in camera and decisions made by a simple majority. All working expenses will be paid by the organising lodge.

The competition is open to any researcher whether certified or not, without discrimination of a racial, national, sexual, or philosophical nature. Candidacies for the prize must be sponsored by at least two freemasons whose masonic qualifications must be confirmed by their masonic authorities. In turn the sponsors will have to vouch in writing for the moral integrity of their candidates.

All applications must be accompanied by a detailed curriculum vitae of the candidates, a résumé of their scientific activities, and the opinion of the authorities under whom they work. All applications must be submitted before 30 December 1986 and addressed to: Mr René De Zuttere, Hoogpadlaan 101, B-2070 Antwerp, Belgium.

The jury will come to a decision not later than 31 March 1987. This decision will be final and not open to appeal. The prize will be

presented during an academic session in Antwerp in May 1987. The masonic lodge "Les Amis du Commerce et la Perseverance Reunis" reserves the right to withhold the prize should the applications appear to be below standard.

Eighth international meeting of dermatological research

The eighth meeting devoted to dermatological research will be held under the auspices of the Société de Recherche Dermatologique in Nantes, France on 9 to 11 October 1986. The meeting will be organised by the department of dermatology, Centre Hospitalier Régional de Nantes, Hôtel-Dieu, Nantes, France (Director, Professor H Barrière). Further information, abstract forms, and application forms may be obtained from Dr JF Stalder, CARD Service de Dermatologie, CHU 44035 Nantes, France.

List of current publications

These selected abstracts and titles from the world literature are arranged in the following sections:

Syphilis and other treponematoses

Gonorrhoea

Non-specific genital infection and related disorders (chlamydial infections; mycoplasmal and ureaplasma infections; general)

Pelvic inflammatory disease

Reiter's disease

Trichomoniasis

Candidosis

Genital herpes

Genital warts

Acquired immune deficiency syndrome

Other sexually transmitted diseases

Genitourinary bacteriology

Public health and social aspects

Miscellaneous

Syphilis and other treponematoses

Acute syphilitic meningitis: its occurrence after clinical and serologic cure of secondary syphilis with penicillin G

LL BAYNE, JW SCHMIDLEY, AND DS GOODWIN (Cleveland, USA). *Arch Neurol* 1986; 43:137-8.

Failure of recommended treatment for secondary syphilis

DM MARKOVITZ, KR BEUTNER, RP MAGGIO, AND RC REICHMAN (Rochester, USA). *JAMA* 1986;255:1767-8.

Syphilis tests in diagnostic and therapeutic decision making

G HART (Adelaide, Australia). *Ann Intern Med* 1986;104:368-76.

Immobilization and neutralization of *Treponema pallidum* attached to cultured mammalian cells

T FITZGERALD (Duluth, USA). *Can J Microbiol* 1986;31:1152-6.

Gonorrhoea

Characteristics of *Neisseria gonorrhoeae* strains isolated on selective and nonselective media

PJ PACE AND BW CATLIN (Milwaukee, USA). *Sex Transm Dis* 1986;13:29-39.

Vancomycin hypersusceptibility in *Neisseria gonorrhoeae* isolated from patients involves diverse mutations

JA KOEBL AND BW CATLIN (Milwaukee, USA). *Antimicrob Agents Chemother* 1986;29:687-95.

The effect of protein II and pili on the interaction of *Neisseria gonorrhoeae* with human polymorphonuclear leucocytes

M VIRJI AND JE HECKELS (Southampton, England). *J Gen Microbiol* 1986;132:503-12.

Bactericidal antibody response of normal human serum to the lipooligosaccharide of *Neisseria gonorrhoeae*

MA APICELLA, MAJ WESTERINK, SA MORSE, H SCHNEIDER, PA RICE, AND JM GRIFFISS (Buffalo, USA). *J Infect Dis* 1986;153:520-6.

Changes in host cell membrane activities in response to adhesion of *Neisseria gonorrhoeae*

GM WISEMAN AND CF MARTIN (Winnipeg, Canada). *Can J Microbiol* 1986;32:83-8.

Single-dose ceftriaxone therapy of gonococcal ophthalmia neonatorum

DA HAASE, RA NASH, H NSANZE, ET AL (Winnipeg, Canada). *Sex Transm Dis* 1986;13:53-5.

Treatment of uncomplicated infections due to *Neisseria gonorrhoeae*: a review of clinical efficacy and in vitro susceptibility studies from 1982 through 1985

RJ RICE AND SE THOMPSON (Atlanta, USA). *JAMA* 1986;255:1739-46.

Non-specific genital infections and related disorders (chlamydial infections)

Isolation of *Chlamydia trachomatis* from men with urethritis: relative value of one vs two swabs and influence of concomitant gonococcal infection

SS SINGAL, RC REICHMAN, PS GRAMAN, C GREISBERGER, MA TRUPEL, AND MA MENEGUS (Rochester, USA). *Sex Transm Dis* 1986;13:50-2.

Chlamydia in women: a case for more action?

LEADING ARTICLE. *Lancet* 1986;i:892-4.

Criteria for selective screening for *Chlamydia trachomatis* infection in women attending family planning clinics

HH HANDSFIELD, LL JASMAN, PL ROBERTS, VW HANSON, RL KOTHENBEUTEL, AND WE STAMM (Seattle, USA). *JAMA* 1986;255:1730-4.

Residues of pelvic inflammatory disease in intrauterine device users: a result of the intrauterine device or *Chlamydia trachomatis* infection?

AM GUDERIAN AND GE TROBROUGH (Los Gatos, USA). *Am J Obstet Gynecol* 1986;154:497-503.

The object of this interesting study was to investigate further the relationship between *Chlamydia trachomatis*, sexually transmitted disease, use of an intrauterine contraceptive device (IUCD), and laparoscopic evidence of current or past pelvic inflammatory disease (pelvic "residues") in 245 infertile women, of whom 69 had used an IUCD. To be included in the study a patient was

required to have had IgG chlamydial antibody estimated at presentation, and to have had direct visualisation of the pelvic organs subsequently. Detailed evaluation of her medical history was then added to consider evidence of previous sexually transmitted disease and to confirm the type of IUCD used where relevant. Antibody estimation was by an indirect fluorescent antibody test on an L2 serovar of *C trachomatis*. A titre of 1/8 was considered to be positive. Endocervical culture or monoclonal stain for *C trachomatis*, or both were also undertaken for 209 women.

In analysing their results, the authors grouped patients into three major categories: those with negative chlamydial serology test results, those with positive results at a low titre; and those with positive results at a high titre (1/512 or higher). These basic categories were then each subdivided into IUCD users and non-users. More (71%) IUCD users were found to have residues at younger ages than non-users (51%). When patients were grouped according to the level of chlamydial antibody titre, however, no appreciable difference in the prevalence of residues was seen between users and non-users. The prevalence of residues was progressively greater with higher antibody titres. At titres exceeding 1/512 almost all patients, both IUCD users and non-users, could be expected to have residues. The number of patients showing evidence of endocervical chlamydial disease was small, as would be expected, (4-7% depending on the test method). In patients with higher titres who used an IUCD an increased frequency of ectopic pregnancy was noted.

The authors concluded that, though their work confirmed the anticipated higher prevalence of inflammatory residuals in women with a history of IUCD usage, these women also had an increased prevalence of chlamydial antibodies. Taking exposure to *C trachomatis* into account, therefore, the first finding is apparent rather than real.

T R Moss

Association of human papillomavirus and chlamydia infections with incidence of cervical neoplasia

TJ ALLERDING, SW JORDAN, AND RE BOARDMAN (Albuquerque, USA). *Acta Cytologica* 1985;29:653-60.

Cytologically detected chlamydial changes and progression of cervical intraepithelial neoplasias: a retrospective case-control study

AB HARNEKAR, G LEIMAN, AND S MARKOWITZ (Johannesburg, South Africa). *Acta Cytologica* 1985;29:661-4.

Evaluation of an enzyme immunoassay for the diagnosis of chlamydial infections in urogenital specimens

KH TJIAM, BYM van HEIJST, A van ZUUREN, ET AL (Rotterdam, the Netherlands). *J Clin Microbiol* 1986;23:752-4.

Micro direct inoculation method for the isolation and identification of *Chlamydia trachomatis*

DCT YONG AND NR PAUL (Windsor, Canada). *J Clin Microbiol* 1986;23:536-8.

Cell-mediated immune responses to *Chlamydia trachomatis* in mothers and infants

AD HEGGIE, PB WYRICK, PA CHASE, AND RU SORESENSEN (Cleveland, USA). *Proc Soc Exp Biol Med* 1986;181:586-95.

Chlamydia trachomatis elementary bodies possess proteins which bind to eucaryotic cell membranes

WM WENMAN AND RU MEUSER (Edmonton, Canada). *J Bacteriol* 1986;165:602-7.

Antigenic specificity of serological response in *Chlamydia trachomatis* urethritis detected by immunoblotting

R CEVENINI, F RUMPIANESI, V SAMBRI, AND M LA PLACA (Bologna, Italy). *J Clin Pathol* 1986;39:325-7.

Treatment of sexually transmitted chlamydial infections

LL SANDERS, R HARRISON, AND AE WASHINGTON (Atlanta, USA). *JAMA* 1986;255:1750-6.

The effect of tetracycline treatment on chlamydial salpingitis and subsequent fertility in the mouse

CE SWENSON, ML SUNG, AND J SCHACHTER (San Francisco, USA). *Sex Transm Dis* 1986;13:40-4.

Non-specific genital infections and related disorders (mycoplasmal and ureaplasma infections)

Dissemination of the *tetM* tetracycline resistance determinant to *Ureaplasma urealyticum*

MC ROBERTS AND GE KENNY (Seattle, USA). *Antimicrob Agents Chemother* 1986;29:350-2.

Non-specific genital infections and related disorders (general)

Etiology of cervical inflammation

J PAAVONEN, CW CRITCHLOW, T DeROUEN, ET AL (Seattle, USA). *Am J Obstet Gynecol* 1986;154:556-64.

Pelvic inflammatory disease

The occurrence of chlamydial and gonococcal salpingitis during the menstrual cycle

RL SWEET, M BLANKFORT-DOYLE, MO ROBBIE, AND J SCHACTER (San Francisco, USA). *JAMA* 1986;255:2062-4.

Epidemiologic and clinical characteristics of pelvic inflammatory disease associated with *Mycoplasma hominis*, *Chlamydia trachomatis*, and *Neisseria gonorrhoeae*
A MIETTINEN, P SAIKKU, E JANSSON, AND J PAAVONEN (Tampere, Finland). *Sex Transm Dis* 1986;13:24-8.

The economic cost of pelvic inflammatory disease

AE WASHINGTON, PS ARNO, AND MA BROOKS (Atlanta, USA). *JAMA* 1986;255:1735-8.

Microbial causes of proven pelvic inflammatory disease and efficacy of clindamycin and tobramycin

JN WASSERHEIT, TA BELL, NB KIVIAT, ET AL (Seattle, USA). *Ann Intern Med* 1986;104:187-93.

Pelvic inflammatory disease: a review with emphasis on antimicrobial therapy

TG BURNAKIS AND NB HILDEBRANDT (Wyandotte, USA). *Rev Infect Dis* 1986;8:86-116.

Trichomoniasis

Growth and cytopathogenicity of *Trichomonas vaginalis* in tissue cultures

FF PINDAK, WA GARDNER, AND MH de PINDAK (Mobile, USA). *J Clin Microbiol* 1986;23:672-8.

Immunogenic proteins of *Trichomonas vaginalis* as demonstrated by the immunoblot technique

GE GARBER, EM PROCTOR, AND WR BOWIE (Vancouver, Canada). *Infect Immun* 1986;51:250-3.

Monoclonal antibody to a major surface glycoprotein immunogen differentiates isolates and subpopulations of *Trichomonas vaginalis*

JF ALDERETE, L SUPRUN-BROWN, AND L KASMALA (San Antonio, USA). *Infect Immun* 1986;52:70-5.

Tioconazole 2% cream in the treatment of *Trichomonas vaginalis* or mixed vaginal infections

C DONADIO (Rome, Italy). *J Int Med Res* 1986;14:50-2.

Candidosis

Immunoglobulin class of anti-candida antibodies in patients with vaginal candidiasis

G BURGESS, HP HOLLEY, AND G VIRELLA (Charlestown, USA). *Diagn Immunol* 1986;4:43-6.

Genital herpes

Herpes encephalitis during pregnancy: failure of acyclovir and adenine arabinoside to prevent neonatal herpes

SA BERGER, M WEINBERG, T TREVES, ET AL (Tel Aviv, Israel). *Israel J Med Sci* 1986;22:41-4.

Confirmation of genital herpes simplex viral infection by an immunoperoxidase technique

GH ANDERSON, JP MATISIC, AND BA THOMAS (Vancouver, Canada). *Acta Cytol (Baltimore)* 1985;29:695-700.

Diagnosis of herpes simplex virus in routine smears by an immunoperoxidase technique

JY WONG, P ZAHAROPOULOS, AND T van DINH (Galveston, USA). *Acta Cytol (Baltimore)* 1985;29:701-4.

Immunoperoxidase staining for the detection of herpes simplex virus antigen in cervicovaginal smears

N IWA, Y KATAYAMA, K ITO, H NISHIURA, S UEDA, AND S KATO (Osaka, Japan). *Acta Cytol (Baltimore)* 1985;29:705-7.

Typing and subtyping of herpes simplex isolates by monoclonal fluorescence

S SUTHERLAND, B MORGAN, A MINDEL, AND WL CHAN (London, England). *J Med Virol* 1986;18:235-45.

Typing of herpes simplex virus with synthetic DNA probes

EM PETERSON, SL AARNAES, RN BRYAN, JL RUTH, AND LM de la MAZA (Irvine, USA). *J Infect Dis* 1986;153:757-62.

Controlled trial of "Intervir-A" in herpes simplex virus infection

C B GOLDBERG (Milwaukee, USA). *Lancet* 1986;i:703-6.

A placebo-controlled trial of topical 8% arildone cream early in recurrent genital herpes

JM DOUGLAS, FN JUDSON, MJ LEVIN, ET AL (Denver, USA). *Antimicrob Agents Chemother* 1986;29:464-7.

Genital warts

Condylomata acuminata and verrucous carcinoma of the bladder: case report and literature review

M WALTHER, DP O'BRIEN, AND HW BIRCH (Atlanta, USA). *J Urol* 1986;135:362-5.

Verrucous carcinoma of the vulva associated with an unusual type 6 human papillomavirus

RF RANDO, TV SEDLACEK, J HUNT, AB JENSON, RJ KURMAN, AND WD LANCASTER (Atlanta, USA). *Obstet Gynecol* 1986;67:705-55.

Condylomata acuminata in the pediatric patient

TB SHELTON, GR JERKINS, AND HN NOE (Memphis, USA). *J Urol* 1986;135:548-9.

Risk factors for condyloma acuminatum in women

JR DALING, KT SHERMAN, AND NS WEISS (Seattle, USA). *Sex Transm Dis* 1986;13:16-8.

Colposcopy in the diagnosis of penile condyloma

TV SEDLACEK, M CUNNANE, AND V CARPINIELLO (Philadelphia, USA). *Am J Obstet Gynecol* 1986;154:494-6.

Reproducibility of the cytologic diagnosis of human papillomavirus infection

PL HORN, DM LOWELL, VA LIVOLSI, AND CA BOYLE (Atlanta, USA). *Acta Cytol (Baltimore)* 1985;29:692-4.

Prospective evaluation of risk of cervical cancer after cytological evidence of human papillomavirus infection

H MITCHELL, M DRAKE, AND G MEDLEY

(Melbourne, Australia). *Lancet* 1986;i:573-5.

In 1979, 846 women had Papanicolaou smears that the Victorian cytology (gynaecological) service (VCGS) reported as having features suggesting human papillomavirus (HPV) infection. There was no evidence of dysplasia or carcinoma before 1979, and the smears showed no evidence of dysplasia or herpes virus infection. Each woman had a repeat smear or histology of the cervix in the following six years, and cervical cautery was never performed without a biopsy having been taken.

In this time, histologically proved carcinoma-in-situ developed in 30 women. Using figures from the adjacent state of South Australia to represent the general population, 1.9 cases were expected. The relative risk for developing carcinoma-in-situ after evidence of HPV infection was 15.6 (95% confidence limits 10.5-22.3, $p < 0.0005$). Younger women showed a greater risk ($\chi^2 = 11.05$, $p < 0.001$), and those aged under 25 when the 1979 smear was taken had a relative risk of 38.7.

Criteria used by the VCGS to diagnose HPV infection are more strict now than in 1979. The possibility is discussed that smears reported in 1979 as showing evidence of HPV infection may have shown mild dysplasia. Evidence is presented that such misclassification probably did not occur to any appreciable degree. The authors feel that the incidence of carcinoma-in-situ in South Australia probably under-represented the true rates, but not by so much that the relative risk would not remain significant. It is also argued that the 30 observed cases may be an underestimate. Cervical biopsy and cautery were performed on 33 women whose histological diagnosis was dysplasia. Carcinoma-in-situ might also have developed in some of the 174 women who had not had a smear for more than four years. It is concluded that cytological evidence of HPV infection is associated with a very significant relative risk for the development of cervical cancer.

P G Watson

Human papillomavirus type 16 DNA in genital tumours: a pathological and molecular analysis

DD LUCA, S PILOTTI, B STEFANON, ET AL (Milan, Italy). *J Gen Virol* 1986;67:583-9.

Cloning and characterization of the DNA of a new human papillomavirus from a woman with dysplasia of the uterine cervix

List of current publications

AT LORINCZ, WD LANCASTER, AND GF TEMPLE (Gaithersburg, USA). *J Virol* 1986;58:225-9.

Cervical intraepithelial neoplasia and condyloma: an analysis of diagnostic accuracy of post-treatment follow-up methods

T FALCONE AND A FERENCZY (Montreal, Canada). *Am J Obstet Gynecol* 1986;154:260-4.

Intralesional recombinant alpha-2 interferon for the treatment of patients with condyloma acuminatum or verruca plantaris

JC VANCE, BJ BART, RC HANSEN, ET AL (Minneapolis, USA). *Arch Dermatol* 1986;122:272-7.

Acquired immune deficiency syndrome

The acute exanthem associated with seroconversion to human T-cell lymphotropic virus III in a homosexual man

MHA RUSTIN, CM RIDLEY, MD SMITH, MC KELSEY, AND N PARKER (London, England). *J Infect* 1986;12:161-3.

Acute HTLV-III infection with roseola-like rash

B LINDSKOV, BØ LINDHARDT, K WEISMANN, ET AL (Copenhagen, Denmark). *Lancet* 1986;i:447.

Acute neuropathy coincident with seroconversion for anti-LAV/HTLV-III

AM PIETTE, F TUSSEAU, D VIGNON, ET AL (Suresnes, France). *Lancet* 1986;i:852.

Lung abscess due to *Corynebacterium equi*: report of the first case in a patient with acquired immune deficiency syndrome

JH SAMIES, BN HATHAWAY, RM ECHOLS, JM VEAZEY, AND VA PILON (Albany, USA). *Am J Med* 1986;80:685-8.

Acquired immune deficiency syndrome in homosexual men with Hodgkin's disease: three case reports

DM BAER, ET ANDERSON, AND LS WILKINSON (Oakland, USA). *Am J Med* 1986;80:738-40.

Phlegmonous gastritis associated with the acquired immunodeficiency syndrome/pre-acquired immunodeficiency syndrome

RE MITTLEMAN AND RV SUAREZ (Miami, USA). *Arch Pathol Lab Med* 1985;109:765-7.

Abnormalities in intestinal mucosal T cells in homosexual populations including those with the lymphadenopathy syndrome and acquired immunodeficiency syndrome
VD RODGERS, R FASSETT, AND MT KAGNOFF (San Diego, USA). *Gastroenterology* 1986;90:552-8.

Cryptococcal disease in patients with the acquired immunodeficiency syndrome: diagnostic features and outcome of treatment

A ZUGER, E LOUIE, RS HOLZMAN, MS SIMBERKOFF, AND JJ RAHAL (New York, USA). *Ann Intern Med* 1986;104:234-40.

Herpes zoster ophthalmicus in patients at risk for the acquired immune deficiency syndrome (AIDS)

EV SANDOR, A MILLMAN, TS CROXSON, AND D MILDVAN (New York, USA). *Am J Ophthalmol* 1986;101:153-5.

Opportunistic infections in patients with AIDS: clues to the epidemiology of AIDS and the relative virulence of pathogens

MJ BLASER AND DL COHN (Denver, USA). *Rev Infect Dis* 1986;8:21-30.

Immediate causes of death in acquired immunodeficiency syndrome

L MOSKOWITZ, GT HENSLEY, JC CHAN, AND K ADAMS (Miami, USA). *Arch Pathol Lab Med* 1985;109:735-8.

Human T-lymphotropic virus type III in high-risk, antibody negative homosexual men

KH MAYER, AM STODDARD, J McCUSKER, D AYOTTE, R FERRIANI, AND JE GROOPMAN (Pawtucket, USA). *Ann Intern Med* 1986;104:194-6.

Human T-cell lymphotropic virus type III infection in a cohort of homosexual men in New York city

CE STEVENS, PE TAYLOR, EA ZANG, ET AL (New York, USA). *JAMA* 1986;255:2167-72.

Association of human T lymphotropic virus type III antibodies with sexual and other behaviours in a cohort of homosexual men from Boston with and without generalized lymphadenopathy

KH MAYER, D AYOTTE, JE GROOPMAN, AM STODDARD, M SARNGADHARAN, AND R GALLO (Pawtucket, USA). *Am J Med* 1986;80:357-63.

Immunologic studies in homosexual and hemophilic subjects with persistent

generalized lymphadenopathy: a comparative analysis

CB DAUL, RD de SHAZO, WA ANDES, AND GA PANKEY (New Orleans, USA). *J Allergy Clin Immunol* 1986;77:295-301.

Screening for antibodies to HTLV-III amongst the semen donors of an AID programme

PD BROMWICH, AP WALKER, SH GREGSON, CF ROSS, RP EGLIN, AND JEM MACEY (Oxford, England). *Br J Obstet Gynaecol* 1986;93:279-81.

Antibody to the retrovirus associated with the acquired immunodeficiency syndrome (AIDS): presence in presumably healthy San Franciscans who died unexpectedly
DL COLEMAN, JM LUCE, JC WILBER, ET AL (San Francisco, USA). *Arch Intern Med* 1986;146:713-5.

Risk of AIDS to health care workers

AMGEDDES (Birmingham, England). *Br Med J* 1986;292:711-2.

Isolation of HTLV-III/LAV from cervical secretions of women at risk for AIDS

MW VOGT, DJ WITT, DE CRAVEN, ET AL (Boston, USA). *Lancet* 1986;i:525-7.

Isolation of AIDS-associated retrovirus from genital secretions of women with antibodies to the virus

CB WOFSEY, JB COHEN, LB HAUSER (San Francisco, USA). *Lancet* 1986;i:527-9.

Vogt *et al* cocultured cervical secretions taken in midcycle from 14 women seropositive for the acquired immune deficiency syndrome (AIDS) virus. Four had evidence of AIDS virus in the cervical fluid, as shown by the presence of reverse transcriptase activity in the cocultivation supernatant. A positive result from the cervical secretions was invariably associated with isolation of the AIDS virus from peripheral blood leucocytes. Filtering of the cervical secretion through a 0.45 µm filter resulted in loss of viral isolation in one case. The method of collection of the cervical secretions was atraumatic, and the cervical samples were free of microscopic blood or semen contamination. The authors conclude that cell associated AIDS virus may be found commonly in infected women, and that this may be the route of heterosexual transmission from female to male.

Wofsey *et al*, using similar techniques of cocultivation with fresh donor peripheral blood lymphocytes, showed evidence of AIDS virus at a low titre in both endocervical cells and cell free vaginal secretions in four of eight seropositive women. Seven had replicating

AIDS virus in peripheral blood mononuclear cells. In every case, the titre of the virus recovered from the cervix or vagina was stated to be extremely low, though no specific measure of viral titre is given. One patient was studied after self induced orgasm, and the increased volume of vaginal secretion is reported to have led to a higher titre of virus recovered. The authors conclude that it is common to find AIDS virus in the genital tract of infected women, and that conditions leading to purulent vaginal discharge may lead to increased viral titre in the secretions.

The AIDS virus has been isolated from a wide range of body fluids, in addition to peripheral blood lymphocytes and plasma; isolation from saliva, tears, breast milk, and seminal fluid are well documented. In addition, the epidemiology of AIDS in Africa has long pointed to equal man to woman and woman to man sexual transmission. These two papers reporting the isolation of AIDS virus from the female genital tract are therefore not surprising, and help to confirm the epidemiological and clinical impression that this virus is heterosexually transmissible in both directions. The role of concurrent sexually transmitted infection of the vagina or the penis as a cofactor in the transmission of the AIDS virus must now be addressed. Meanwhile, these observations reinforce the need for adequate sterilisation of speculums, or for the transition to fully disposable equipment.

J Weber

Isolation of the human T-cell leukemia/lymphotropic virus type III from the cornea

SZ SALAHUDDIN, AG PALESTINE, E HECK, ET AL (Bethesda, USA). *Am J Ophthalmol* 1986;101:149-52.

Antibodies to human T-lymphotropic virus type III (HTLV-III) in saliva of acquired immunodeficiency syndrome (AIDS) patients and in persons at risk for AIDS

DW ARCHIBALD, L ZON, J E GROOPMAN, M F McLANE, AND M ESSEX (Boston, USA). *Blood* 1986;67:831-4.

Hepatitis B virus (HBV) DNA in leucocytes in acquired immune deficiency syndrome (AIDS)

LE LIE-INJO, P VOLBERDING, JA GOLDEN, AND AR HERRERA (San Francisco, USA). *Cytobios* 1985;44:119-28.

Sputum examination for the diagnosis of *Pneumocystis carinii* pneumonia in the

acquired immunodeficiency syndrome

AE PITCHENIK, P GANJEI, A TORRES, DA EVANS, E RUBIN, AND H BAIER (Miami, USA). *Am Rev Respir Dis* 1986;133:226-9.

The aim of this study was to investigate the diagnostic use of sputum examination for *Pneumocystis carinii* in the acquired immunodeficiency syndrome (AIDS). Previous experience with other immune deficient groups has suggested that sputum examination is of little value in the diagnosis of *P carinii* pneumonia and that bronchoscopy with transbronchial lung biopsy, bronchial washings, and alveolar lavage are necessary to make a diagnosis of this predominantly alveolar infection. Should simple sputum examination prove to be of diagnostic value in at least an appreciable proportion of patients with AIDS who have suspected *P carinii* pneumonia, diagnosis would be faster and the need for bronchoscopy reduced in patients who give positive sputum test results. This would benefit patients by avoiding the discomfort and anxiety of bronchoscopy. It would also be of benefit to the bronchoscopy service, especially in view of the special measures needed to sterilise equipment in this group of patients.

In this study 43 patients with AIDS or suspected AIDS had sputum induced by inhalation of ultrasonically nebulized saline just before bronchoscopy for an unexplained pulmonary infiltrate on chest x ray. *P carinii* was identified in 20 of the 43 patients. In patients with *P carinii*, sputum was positive in 11 of 20 (55%), bronchial washings were positive in 11 of 14 tested (79%), brush biopsies in nine of 17 tested (53%), and transbronchial lung biopsies in 18 of 20 (90%). In the two patients missed by transbronchial lung biopsy, sputum examination was the only method of diagnosis in one whereas bronchial washings and brushings were positive in the other.

This study suggests an important and previously unexpected diagnostic role for sputum examination to identify *P carinii* in patients with suspected AIDS. As a note of caution this success must be seen in the context of an enthusiastic research team of cytologists who found a yield of between two and five cysts in sputum samples in comparison to between 10 and 70 on biopsy specimen. It remains therefore to evaluate this technique in the conventional setting. Perhaps of most interest is the question that arises from this study as to the cause of the apparent discrepancy between these results and the identification of *P carinii* by sputum examination in other immune compromised groups, such as renal transplant patients. The authors speculate on this matter and suggest some interesting possibilities, including a

specific immune defect in patients with AIDS that results in a high yield of cysts in sputum. Unfortunately the group of patients studied included only nine patients with AIDS, and the rest were suspected cases only. If this result is confirmed in a future study of a clearly defined group of patients with AIDS whereas sputum similarly collected and examined from patients with other forms of immune deficiency and infected with *P carinii* fails to show such a yield of cysts, light may be shed on the pathogenesis of the *P carinii* infection in the two groups. Another suggested cause for the high yield of sputum positive results is the method of sputum collection with nebulized saline, but this should be easily tested by a simple comparison of sputum collected conventionally and by this technique. Finally, even urgently requested bronchoscopy is not usually undertaken for several hours, during which time three samples of sputum might be collected. It would be of interest to assess the improvement in yield, if any, that this would produce.

A E Butler

The recognition of *Pneumocystis carinii* in routine Papanicolaou-stained smears

TS GREAVES AND SM STRIGLE (Los Angeles, USA). *Acta Cytol (Baltimore)* 1985;29:714-20.

Cell population obtained by bronchoalveolar lavage in *Pneumocystis carinii* pneumonitis

J FLEURY, E ESCUDIER, M-J POCHOLLE, C CARRE, AND JF BERNAUDIN (Creteil, France). *Acta Cytol (Baltimore)* 1985;29:721-6.

Cytologic diagnosis of *Pneumocystis carinii* infection by bronchoalveolar lavage in acquired immune deficiency syndrome

M ORENSTEIN, CA WEBBER, AND AE HEURICH (New York, USA). *Acta Cytol (Baltimore)* 1985;29:727-31.

Clinical investigations of lymphadenopathy, including lymph node biopsies in 24 homosexual men with antibodies to the human T-cell lymphotropic virus type III (HTLV-III)

CF FARTHING, K HENRY, DC SHANSON, ET AL (London, England). *Br J Surg* 1986;73:180-2.

Surgical biopsy for persistent generalized lymphadenopathy

HJC RASHLEIGH-BELCHER, CA CARNE, IVD WELLER, AM SMITH, AND RCG RUSSELL (London, England). *Br J Surg* 1986;73:183-5.

Strategy for lymph node biopsy in homosexual men suspected of having LAV/HTLV-III related disease

HJ SCOTT, MJ GLYNN, IF LANE, *ET AL* (London, England). *Br J Surg* 1986;73:186-7.

Multinucleated giant cells in brain: a hallmark of the acquired immune deficiency syndrome (AIDS)

H BUDKA (Vienna, Austria). *Acta Neuropathol (Berl)* 1986;69:253-8.

AIDS-related lymphomas: evaluation by abdominal CT

DA NYBERG, RB JEFFREY, MP FEDERLE, K BOTTLES, AND DI ABRAMS (San Francisco, USA). *Radiology* 1986;159:59-63.

Characterization of highly immunogenic p66/p51 as the reverse transcriptase of HTLV-III/LAV

F diMARZO VERONESE, TD COPELAND, AL deVICO, *ET AL* (Rockville, USA). *Science* 1986;231:1289-91.

Long-term cultures of HTLV-III-infected T-cells: a model of cytopathology of T-cell depletion in AIDS

D ZAGURY, J BERNARD, R LEONARD, *ET AL* (Paris, France). *Science* 1986;231:850-3.

Stability and inactivation of HTLV-III/LAV under clinical and laboratory environments

L RESNICK, K VEREN, SZ SALAHUDDIN, S TONDREAU, AND PD MARKHAM (Rockville, USA). *JAMA* 1986;255:1887-91.

Defective regulation of Epstein-Barr virus infection in patients with acquired immunodeficiency syndrome (AIDS) or AIDS-related disorders

DL BIRX, RR REDFIELD, AND G TOSATO (Washington, USA). *N Engl J Med* 1986;314:874-9.

Administration of 3'-azido-3'-deoxythymidine, an inhibitor of HTLV-III/LAV replication, to patients with AIDS or AIDS related complex

R YARCHOAN, RW KLECKER, KJ WEINHOLD, *ET AL* (Bethesda, USA). *Lancet* 1986;i:575-80.

This important paper documents the first clinical pilot study of the use of 3'-azido-3'-deoxythymidine (AZT) as an antiviral agent against human T lymphotropic virus type III or lymphadenopathy associated virus (HTLV III/LAV) in vivo. Nineteen patients were treated with different dosage regimens for six weeks, there was no control group. The trial established that good blood concentrations were obtained by intravenous and

oral administration and that toxicity was minimal. A modest improvement in immune function, as documented by delayed type hypersensitivity skin testing and OKT4 positive lymphocyte counts, was recorded, though the authors correctly observe that this may have been a chance finding in a small group and not related to the treatment. More impressive is the fact that two patients had spontaneous clearance of chronic fungal nailbed infections with specific antifungal treatment. Detailed data of virus isolation are not given, but HTLV III/LAV was isolated during treatment on all regimens except the highest dose (5 mg/kg body weight intravenously). In the four patients on this regimen, however, the absence of ability to detect virus was made less impressive by the fact that the virus had not been detected from two patients before treatment. This paper establishes, however, that AZT is most certainly worthy of further investigation as a potential treatment for infection with HTLV-III/LAV.

C Farthing

Treatment of serious cytomegalovirus infections with 9-(1, 3-dihydroxy-2-propoxymethyl) guanine in patients with AIDS and other immunodeficiencies

COLLABORATIVE DHPG TREATMENT STUDY GROUP (Palo Alto, USA). *N Engl J Med* 1986;314:801-5.

Other sexually transmitted diseases

Characterization of a *Haemophilus ducreyi* mobilizing plasmid

PJ McNICOL, WL ALBRITTON, AND AR RONALD (Winnipeg, USA). *J Bacteriol* 1986;165:657-9.

The treatment of chancroid

GP SCHMID (Atlanta, USA). *JAMA* 1986;255:1757-62.

Long term follow up of chronic hepatitis B virus infection in intravenous drug abusers and homosexual men

T MOESTRUP, BG HANSSON, A WIDELL, E NORDENFELT, AND I HÄGERSTRAND (Malmö, Sweden). *Br Med J* 1986;292:854-7.

Antiviral treatment in chronic infection with hepatitis B virus

G ALEXANDER AND R WILLIAMS (London, England). *Br Med J* 1986;292:915-7.

Is *Entamoeba histolytica* in homosexual men a pathogen?

D GOLDMEIER, PG SARGEANT, AB PRICE, *ET AL* (London, England). *Lancet* 1986;j:641-4.

In this paper, the authors set out to disprove the theory that *Entamoeba histolytica* is pathogenic in homosexual men. They selected 23 patients from whom *E histolytica* was isolated and who had one or more symptoms suggestive of intestinal amoebiasis. Patients with other sexually transmissible infections were excluded. The control group consisted of 11 homosexual men with similar symptoms. No trophozoites or antibody to *E histolytica* were found in either group. Moderately severe proctitis was seen on histopathology of rectal biopsies in 38% of *E histolytica* secretors, but 18% of the control group showed similar histopathological changes; this difference did not reach significance. Successful eradication of *E histolytica* did not result in reduction of any inflammatory histopathology. Thus the authors conclude that *E histolytica* is non-pathogenic in homosexual men.

The above findings are in direct contrast to the findings of McMillan *et al* in a study published in *Gut* in 1984. These workers found that on rectal biopsy there was appreciably greater histopathological abnormality in *E histolytica* secretors than in controls, and that these changes and any relevant symptoms resolved after treatment.

How does one reconcile these conflicting reports? Firstly, there were differences in selection of patients, which are particularly relevant to the control group. Goldmeier *et al* deliberately selected symptomatic patients, reasoning that if no pathogenicity could be shown in this group their hypothesis was likely to be correct. This meant, however, that their control group, who were also symptomatic, were likely to show histopathological abnormalities, thus making a significant difference unlikely. On the other hand, McMillan *et al* did not select on the basis of symptoms. It is therefore not surprising that there was less evidence of proctitis in their control group and an appreciable increase in proctitis in the *E histolytica* excretors.

The irreconcilable point however, is that Goldmeier *et al* found an improvement in proctitis after treatment, whereas McMillan *et al* found resolution of inflammatory changes in treated patients.

Should a symptomatic patient in whom the only organism isolated is *E histolytica* be treated or not? Until somebody carries out a definitive study that includes the cause (or causes) of non-specific proctitis, that decision must rest with the individual doctor. I would treat.

G R Scott

Isoenzyme analysis of *Entamoeba histolytica* isolated from homosexual men

HM MATHEWS, DM MOSS, GR HEALY, AND D MILDVAN (Atlanta, USA). *J Infect Dis* 1986;153:793-5.

Genitourinary bacteriology

***Gardnerella vaginalis* and mosaic colposcopic pattern of the cervix: casual or causal association**

J GONZALEZ-FALCÓ, M JURADO, AM MADAMBA, AND A ORIOL (Pamplona, Spain). *Gynecol Obstet Invest* 1986;21:108-10.

Bacterial flora of the cervix in women using different methods of contraception

M HAUKKAMAA, P STRANDEN, H JOUSIMIES-SOMER, AND A SIITONEN (Helsinki, Finland). *Am J Obstet Gynecol* 1986;154:520-4.

Fusobacteria: an important cause of chorioamnionitis

G ALTSHULER AND S HYDE (Oklahoma City, USA). *Arch Pathol Lab Med* 1985;109:739-43.

Diagnosis of intrauterine infection by demonstration of antibody-coated bacteria in the amniotic fluid

M MØLLER, J SØRENSEN, FL JEPSEN, AND AC THOMSEN (Aarhus, Denmark). *Br J Obstet Gynaecol* 1986;93:240-41.

Methods for quantitative and qualitative evaluation of vaginal microflora during menstruation

AB ONDERDONK, GRZAMARCHI, JA WALSH, RD MELLOR, A MUÑOZ, AND EH KASS (Boston, USA). *Appl Environ Microbiol* 1986;51:333-9.

Recovery of microorganisms in semen and relationship to semen evaluation

A NAESSENS, W FOULON, P DEBRUCKER, P DEVROEY, AND S LAUWERS (Brussels, Belgium). *Fertil Steril* 1986;45:101-5.

Public health and social aspects

Sexually transmissible infectious agents in sexually active and virginal asymptomatic adolescent girls

RC BUMP, LA SACHS, AND WJ BUESCHING (Columbus, USA). *Pediatrics* 1986;77:488-94.

Deaths due to sexually transmitted diseases: the forgotten component of reproductive mortality

DA GRIMES (Atlanta, USA). *JAMA* 1986;255:1727-9.

Miscellaneous

Male influences on cervical cancer risk

MV ZUNZUNEGUI, M-C KING, CF CORIA, AND J CHARLET (Berkeley, USA). *Am J Epidemiol* 1986;123:302-7.

Simple device to prevent accidental needle-prick injuries

AD NIXON, R LAW, JA OFFICER, JF CLELAND, AND PN GOLDWATER (Auckland, New Zealand). *Lancet* 1986;i:888-9.